Comparisons of Job Characteristics

Focus Occupation: Computer Numerically Controlled Machine Tool Programmers, Metal and Plastic (51-4012)
Associated Occupation: Machinists (51-4041)

Compare Knowledge
Compare Skills
Compare Abilities
Compare Detailed Work Activities
Compare Tools and Technologies

<<	Focus occupation element is much lower
<	Focus occupation element is lower
0	Focus occupation element is at a similar level
>	Focus occupation element is at a higher level
>>	Focus occupation element is at a much higher level

Knowledge

Similarity of Focus Occupation to Associated Occupation: 93

Focus Occupation: Computer Numerically Controlled Machine Tool Programmers, Metal and Plastic (51-4012)
Associated Occupation: Machinists (51-4041)

Associated Occupation's Key Knowledge Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation	
Mechanical	6.8	18.0	15.5	<	Expanded education and/or training may be required
Mathematics	9.2	14.2	17.4	>	Current knowledge level is likely sufficient
Production and Processing	6.0	12.7	10.5	<	Expanded education and/or training may be required
Design	5.2	11.2	13.8	>	Current knowledge level is likely sufficient
Engineering and Technology	5.7	10.2	13.5	>>	Current knowledge level is likely more than sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Skills

Similarity of Focus Occupation to Associated Occupation: 23

Focus Occupation: Computer Numerically Controlled Machine Tool Programmers, Metal and Plastic (51-4012)
Associated Occupation: Machinists (51-4041)

Associated Occupation's Key Skills Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation	
Quality Control Analysis	5.9	12.6	8.7	<<	Extensive development of skills in this area may be required
Operation Monitoring	6.6	12.0	11.1	0	Current skill level may be sufficient
Operation and Control	5.4	11.1	8.6	<	A higher skill level may be required
Troubleshooting	4.5	10.2	7.9	<	A higher skill level may be required
Equipment Maintenance	3.5	9.3	5.8	<<	Extensive development of skills in this area may be required
Equipment Selection	3.3	8.6	7.0	<	A higher skill level may be required

Repairing	3.4	8.5	5.6	<<	Extensive development of skills in this area may be required
Installation	1.7	6.0	2.1	<<	Extensive development of skills in this area may be required
Technology Design	2.6	6.0	5.5	0	Current skill level may be sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Abilities

Similarity of Focus Occupation to Associated Occupation: 81

Focus Occupation: Computer Numerically Controlled Machine Tool Programmers, Metal and Plastic (51-4012)
Associated Occupation: Machinists (51-4041)

Associated Occupation's Key Abilities Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation
Control Precision	6.6	13.3	9.4	<<	Extensive improvement in abilities may be required
Finger Dexterity	7.6	11.6	8.8	<<	Extensive improvement in abilities may be required
Manual Dexterity	6.5	11.1	7.2	<<	Extensive improvement in abilities may be required
Multilimb Coordination	6.0	10.7	7.4	<<	Extensive improvement in abilities may be required
Reaction Time	4.8	10.1	9.7	0	Current ability level may be sufficient
Hearing Sensitivity	5.6	9.3	8.2	<	Some improvement in abilities may be required
Rate Control	3.8	8.6	7.2	<	Some improvement in abilities may be required
Wrist-Finger Speed	3.2	7.3	5.9	<	Some improvement in abilities may be required
Sound Localization	2.2	6.2	1.6	<<	Extensive improvement in abilities may be required
Speed of Limb Movement	3.2	6.1	5.1	<	Some improvement in abilities may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Activities that Both Occupations Have in Common

Similarity of Focus Occupation to Associated Occupation: 92

Focus Occupation: Computer Numerically Controlled Machine Tool Programmers, Metal and Plastic (51-4012)
Associated Occupation: Machinists (51-4041)

Work Activities	Exclusivity of Activity
Determine tasks needed to complete machined products	87
Lay out machining, welding or precision assembly projects	63
Program computer numerical controlled machines	89
Read blueprints	10

Read technical drawings	7
Solve machine tool problems	89
Understand technical operating, service or repair manuals	6
Use drafting or mechanical drawing techniques	50

Not all positions in these occupations will necessarily perform all of the listed activities. The exclusivity rating is an indication of how unique the activity is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations engage in that activity.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Tools and Technologies that Both Occupations Have in Common

Similarity of Focus Occupation to Associated Occupation: n/a

Focus Occupation: Computer Numerically Controlled Machine Tool Programmers, Metal and Plastic (51-4012)
Associated Occupation: Machinists (51-4041)

Tools and Technologies	Exclusivity
Tools and technology data is unavailable for one or both occupations.	

Not all positions in these occupations will necessarily use all of the listed tools and technologies. The exclusivity rating is an indication of how unique the tool or technology is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations use that tool or technology.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.